LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
MYLAVARAM
TRUTH ALWAYS TRIUMPHS
HARD WORK PAYS

TECH ERA

STUDENT TECHNICAL MAGAZINE

DEPARTMENT OF IT (LBRCE)

VOLUME 2
(2016-2017)

VISION AND MISSION STATEMENTS OF THE DEPARTMENT

DEPARTAMANET VISION

- To emerge as one of the most preferred department for the budding engineers, aspiring to be successful IT professionals

DEPARTAMANET MISSION

- **DM1**: To inculcate team skills and leadership qualities in the student though projects, seminars and group activities.
- **DM2**: To impart quality education with a well-designed curriculum, consistent with industry requirements, that equips the student to face the career challenges.
- **DM3**: To cultivate the qualities of social awareness and service to the humanity among students.
- **DM4**: To extend the student's learning beyond the curriculum, through workshops on cutting edge technologies

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

Graduates of Information Technology programme will be:

- **PEO 1:** Pursue a successful career in the area of Information Technology or its allied fields.
- **PEO 2:** Exhibit sound knowledge in the fundamentals of Information Technology and apply practical experience with programming techniques to solve real world problems.

PEO 3: Demonstrate self-learning, life-long learning and work in teams on multidisciplinary projects.

PEO 4: Understand the professional code of ethics and demonstrate ethical behavior, effective communication, and team work and leadership skills in their job

PROGRAM OUTCOMES(POs):

Graduates of Information Technology programme will have the ability to:

1. Engineering knowledge:

Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis:

Identify, formulate, review research literature, and analyze complexengineering problems reaching substantiated conclusi-ons using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions:

Design solutions for complex engineering problems anddesign system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems:

Use research-based knowledge and researchmethods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage:

- Create, select, and apply appropriate techniques, resources, and modernengineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society:

- Apply reasoning informed by the contextual knowledge to assesssocietal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability:

- Understand the impact of the professional engineering solutionsin societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics:

Apply ethical principles and commit to professional ethics and responsibilities and norms ofthe engineering practice.

9. Individual and team work:

Function effectively as an individual, and as a member or leader indiverse teams, and in multidisciplinary settings

10. Communication:

Communicate effectively on complex engineering activities with the engineeringcommunity and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance:

Demonstrate knowledge and understanding of theengineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning:

Recognize the need for, and have the preparation and ability to engage inindependent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs):

Graduate of the Information Technology will have the ability to

1. Organize, Analyze and Interpret the data to extract meaningful conclusions.
2. Design, Implement and Evaluate a computer-based system to meet desiredneeds.
3. Develop IT application services with the help ofdifferent currentengineering tools.

About the Department

The department of Information Technology was established in the year 1999 with an intake of 40 seats in UG program. Student intake is increased from 40 to 60 in the year of 2001. It is the one of the most emerging programme in LBRCE. As IT plays a remarkable role in the almost all sectors, due to this the need of Information Technology Engineers increased who could gain knowledge in recent technologies. Our department is intended to train the students in elementary courses and cutting-edge technologies like Digital marketing, Social networking, Digital communication, Cloud computing, Android application, and Big data for solving many social and business problems.

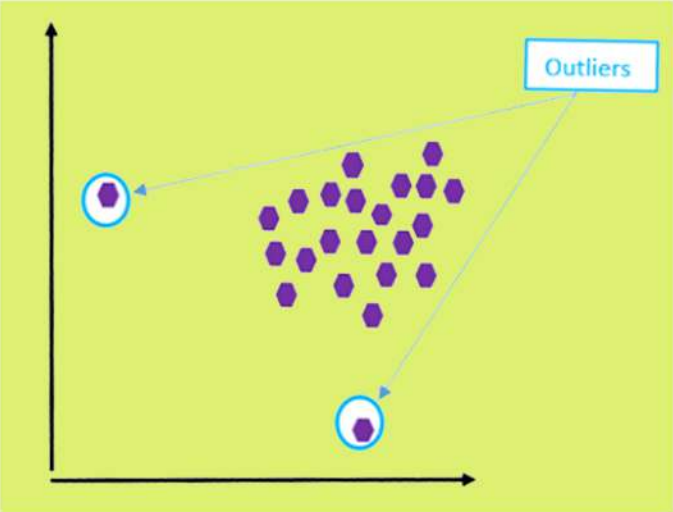
Our future Software Engineers, Entrepreneurs, and Researchers are encouraged with inventive approach. We have an excellent infrastructure and advanced labs to expedite our students. The Department facilitates innovative practices such as student internships, mini and major projects to meet the requirements of employment, teaching-learning process and entrepreneurship. To upgrade the knowledge of students, department offers many tools and Software applications. The LBRCE-CSI students' chapter has been actively organizing events like Technical Seminars, Workshops and Guest lecturers.

The Department has well qualified and experienced faculty. The department has 16 teaching faculty with 4 Doctorates and the rest with M.Tech. Four faculties are pursuing Ph.D in various Universities.

The faculties are engaged in research activities (including funded projects) in their areas of specialization to subsidize the knowledge transfer in their corresponding arenas. Numerous research papers have been published in National, International Journals and Conferences by our faculty and students.

FACULTY ARTICLES

Unmasking Outliers in Large Distributed Databases Using Cluster Based Approach



Outliers are dissimilar or inconsistent data objects with respect to the remaining data objects in the data set or which are far away from their cluster centroids. Detecting outliers in data is a very important concept in know ledge Data Discovery Discovery process for finding hidden knowledge. The task of detecting the outliers has been studied in a large number of research areas like Financial Data Analysis, Large Distributed Systems, Biological Data Analysis, Data Mining, Scientific Applications, Health monitoring, etc., Existing research study of outlier detection shows that Density Based outlier detection techniques are robust. Identifying outliers in a distributed environment is not a simple task because processing with a distributed database raises two major issues. First one is rendering massive data which are generated from different databases. And the second is data integration, which may cause data security violation and sensitive information leakage. Handling distributed database is a difficult task. In this paper, we present a cluster based outliers detect ion to spot outliers in large and vibrant (updated dynamically) distributed database in which cell density based centralized detection is used to succeed in dealing with massive data rendering problem and data integration problem. Experiments are conducted on various datasets and the obtained results clearly show the robustness of the proposed technique for finding outliers in large distributed database.

Clustering Based Spotting Outliers in Large Distributed Database consists of following steps

- **Step Wise description of CluBSOLD:** Clustering dataset in each individual database (for distributed sites) The incoming data is gathered at specific time interval. Find the cluster index number and cluster density by applying k-Medoid clustering to the data of each site. The cluster index increases when a new cluster forms and cluster density increases when a new data object is added to the cluster. The main reason for determination of cluster index and cluster density is to make easier in finding local outliers.

- **Determining the global data summary (for mediator):** After the completion of step 1 each dataset is partitioned into clusters to determine the global data summary. Only the cluster index and cluster density information are first transmitted from each site to the mediator. This task prevents the data security violation. The mediator aggregates the density information of each cluster

- **Determining user-supplied top n global outliers (for mediator):** At mediator site generates the top n global outliers from collected top n local outliers by merging them and they are returned to the end user as requested top n global outliers

Dr.D.Nagaraju
Professor & HOD

The Internet of Things: Origin and Applications

Introduction:

Internet of things refers to identifying a physical Object through internet. Any object even a human being, animal or anything else can be connected in Internet so that they can be accessible from anywhere in the world through internet. In early days, communication was difficult among people. Communication between neighboring cities, towns orvillages used to take several days/hours. It depended only on human messengers' birds that used to carry the message anddeliverit to appropriate destination. This was the early postal/communication system. Later invention of motor vehicleseased the message delivery process. Invention of telegram and telephone made possible quick communicationamong the various persons and entities near and far away. After invention of computers and network, information started getting exchanged through the computers. Initially, they used some sort of cables to provide information sharing among thecomputer systems. But such connection had some limitations; it only connected systems in nearby locations. For connecting systems in remote locations cables need to be laid for a long distance, which is very expensive. To overcome this limitation,telephone lines were used for connecting the computers with the help of modem. This is how internet evolved; it led to a huge revolution in the globe, communication was made easy and information sharing between the systems was no longer complex. Earlier the internet was used for information sharing, sending mails, download and upload of files. But now itis being used for many applications and in many fields which were unimaginable a decade ago.

Industry and Social Application :

In a boiler industry its temperature and pressure should be kept under thecontrol, if it exceeds certain value the boiler blows up. So the temperature and pressure needs to be monitoredregularly. Human being going near the boilers having heavy temperature around 1000° C or more is not possible. Herecomes the help of internet. In a forest, the major problem is forest fire which burns the trees and animals. Deforestation brings imbalance in the eco system, and effects climate change. The solution to this is to detect early so that it can be prevented or controlled. But how the forest fire can be identified in early stage?In the above two scenarios remotesensors can be used which can be connectedto the network, and information about theenvironment like temperature, pressureetc. can be received for further analysis andaction. The smoke detecting sensors canbe deployed in forest so that they can send the information about the fire quickly to thecontrol station in order to control the fire inearly stage to save the forest.

Wireless Sensor Networks, are thebest examples of how non-computerscan be interconnected. These wirelesssensors are used in many fields, in Forestto monitor and send alarm regarding the Forest fire, in Military field it will bedeployed in multiple remote locationsso that information can be exchangedamong them.Radio-Frequency Identification(RFID) is a wireless device used to identifyany device or a person. It is mostly used toauthenticate a person, to track the deviceprogress in assembly line. For avoiding traffic at toll gates RFID can be used. In acar, bus or lorry, RFID tag can be fixed inthe front Glass, so that the vehicles neednot stop there. In India most of the tollgates use RFID tags to identify the publicvehicles in order to minimize the trafficjam in toll gates.Both Wireless sensors and RFID areused to track or observe the status of avehicle, person, location etc.

Suggested Applications:

For Medical: There exist wearable sensors which canbe used to identify or track person's oran object's movements. Such sensorscan also be used to get the informationregarding patient's body temperature,pulse rate, sugar and blood pressure levelsetc. In a hospital it can be used to observethe patient, and such information can berecorded automatically in a system andif anything goes wrong send alarm to thedoctor or a patient by means of SMS or toa dedicated application in a mobile.

For Public Distribution System (PDS): In India one of the major problems iscivil supply trafficking. Goods supplied toone particular area can be taken away bystrangers. This affects the needy peopleand it's a big headache for the governmentto stop this kind of activity. To prevent this,the GPS can be fixed in each public goodscarrying vehicle, so that its movementcan be recorded and they can be trackedcompletely from source to destination.

For Physically Impaired: The sensors can be used for the blinds toidentify the objects ahead when they walkon the road. Normally, they use a stick toidentify the objects in their way. Insteadsensors can be fixed on the stick whichemit some ultrasonic sound and observeback like the principle of SONAR. If thereflection is quicker we can calculate thedistance between object and blind person.The distance can be intimated to theblind through the headphone. Integratingsuch sensors and navigators will helpthem walk anywhere without anyone'sassistance. Using the navigator they canspecify the destination, the navigator willcalculate the optimal route and tell theroute to them through the headphone.

For Traffic Regularization: The traffic violators can be identified usingthe RFID enabled number plates. When aperson violates the traffic automaticallythe vehicle id can be obtained using theRFID number plate if the RFID detectorsare placed in the junctions. For example,the speed violators can be identified easilyby keeping two RFID receivers about 100mapart. If a vehicle crossed the first detector it will read the number of that vehicle and when it crosses the second detector it reads the number again and calculates the speed using the time taken to cross that 100m distance. If a vehicle crosses 100m distance in 5secs then its speed is 72kmph. If the speed limit of that location is only 20kmph then it's clear violation. The intimation can be sent to the control room so that the vehicle can be tracked in some other detector. The RFID, Wireless sensor and GPS can together connect any object in the world so that it is possible to do information sharing, retrieval, monitoring and taking necessary steps to control them with less effort and in quick time

Dr.S. Naganjaneyulu
Professor

Software Quality

Software is integrated in to our lives more frequently in each and every aspect of our lives. It grows rapidly in its size and functionality, so we need to develop more accurate, high-quality and reliable software to attain the software quality assurance more efficiently and proficiently. To estimate the quality of software artifacts and to stay behind its level far above the ground is much more complicated than to do them for the other developed goods.

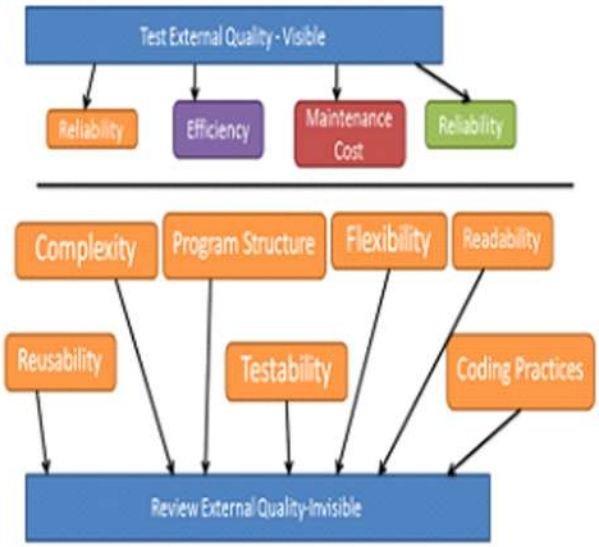


Fig: Software Quality

Software Quality: The degree to which a software product meets established requirements is the software quality. The quality depends upon the degree to which those established requirements accurately represent stakeholders and users. A software quality is defined based on the study of external and internal features of the software. The external quality is defined based on how software performs in real time circumstances in operational mode and how it is useful for its users. The internal quality focuses on the essential aspects that are reliant on the quality of the code which is developed.

The user concentrates more on the software how it works at the external level, but the quality at external level can be maintained only if the coder has written a meaningful and good quality code..

The Quality Attributes: According to ISO 1926 software quality attributes. Quality attribute approach focuses on six quality attributes: 1) Functionality 2) Reliability 3) Usability 4) Efficiency 5) Maintainability 6) Portability.

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1. Functionality:

It is the ability o the system to do some specific task. It is any necessary purpose of any product or service. But the functionality does not establish the architecture and there is no end for creating the architecture to gratify functionality.

2. Reliability:

Reliability may be defined as the probability of an item to perform a required function under stated conditions for a specified period of time. Software Reliability is defined as the probability of the failure free software operation for a specified period of time in a specified environment. Software reliability also affects the system reliability. Unreliability of any product comes due to the failures or presence of faults in the system.

The unreliability of software is primarily due to bugs or design faults in the software.

3. Usability:

This exists with regard to the functionality and refers to the easiness of a given function. The product with more usability can help to differentiate products from those competitors. If two products are significantly equal in effectiveness, the usability will probably be regarded as superior.

4. Efficiency:

This is concerned with the system resources, like the amount of memory space, disk space and network and so on. Efficiency is a measurable concept; Efficiency can often be expressed as a percentage of the result that could ideally be expected

5. Maintainability:

IEEE defines maintenance as 'a process of modifying a software system or component after delivery to correct faults, to improve performance or other attributes or to adapt the product to a changed environment.' Software maintainability is defined as the application is implicit and improved. Software maintenance is very important because 75% budget is dedicated to this. Learning from the past in order to improve the ability to maintain systems, or improve reliability of systems based on maintenance experience.

6. Portability:

It is able to move software from one machine platform to another. Portability is a characteristic attributed to a computer program if it can be used in operating systems other than the one in which it was created without requiring major rework. USB sticks can be used on any computer due to portability and we can store information in removable disks.

Dr. Rama Devi Burri
Associate Professor

A framework for monitoring healthcare monitoring of college students using Machine Learning and Data Analytics

The idea is to maintain a database of records of students visiting healthcare facility at their respective college or university. The items of interest include student details like Gender, age, State, Problem and prescription given by the doctor. This will be an active database that will be live and growing every day. The proposed framework will provide an interface to every college to upload records of student visits at their respective health centres. On this database, data mining and machine learning techniques can be applied to extract hidden patterns. Also, the proposed system will be able to generate different kinds of reports as per the needs of the different stake holders.

The input to the system will be details of the students visiting healthcare centres at their respective colleges or universities. This data will be uploaded to a central server to develop an integrated database. This database will be growing on daily basis with new records being added to it. Using data analytics and machine learning algorithms, models will bedeveloped to extract patterns of interest and subsequently help in healthcare prediction and corrective strategies.

Outcomes of the proposed system

- Database of medical records
- Research Opportunities
- Extraction of Medical Knowledge
- Foreseeing the future
- Programme of study versus health
- Scope for Self-learning algorithms
- For regulatory authorities
- Impact on the College or University

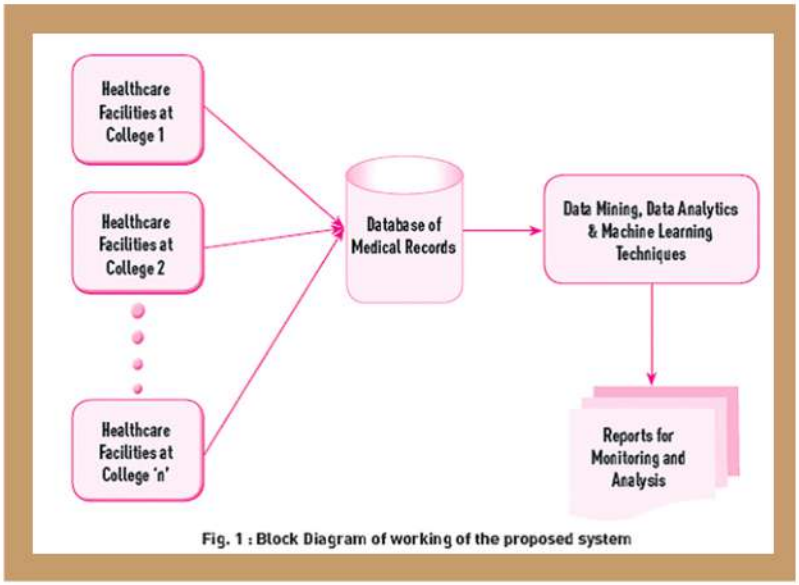


Fig. 1 : Block Diagram of working of the proposed system

Lavanya Kampa
Sr.Assit. Professor

The Future of Multi-Cloud Computing

Like so many other IT solutions, cloud computing services have long been promoted from a standpoint of administrative efficiency. As the rationale goes, if you get your cloud services from a single provider, you'll enjoy the reduced hassle of consolidating third party business relationships, receive IT services at bargain prices, and have an easier time coordinating those services.

It's true that using fewer service providers can offer some nice perks, but cloud computing is moving in the opposite direction at many companies. Instead of reaping the benefits of placing cloud services under one umbrella, businesses are mining the advantages of the antithetical approach: receiving cloud services from multiple providers — a discipline known as "multi-cloud computing."

According to a mid-2016 report from Business Cloud News (BCN), "57% of organizations have no multi-cloud strategy at all, whereas 35% do not have a private cloud strategy, and 28% lack one for [a] public cloud." According to IT commentators ranging from Google to Forbes, these three groups have one thing in common: All of them will increasingly adopt multi-cloud strategies as the technology improves and proliferates.

Multi-cloud computing brings the need to maintain multiple cloud provider relationships instead of maintaining just one. In the aftermath of the Great Recession, when company decision makers are still accustomed to viewing every kind of business functionality through the lens of cost cutting, it begs the question: What do companies get in return for taking extra time to oversee those relationships? The answer is simultaneously vague and clear: It depends on the needs of the company in question. However, the characteristics of some companies set them up to benefit from multi-cloud computing more than other companies.

Anupriya Koneru
Assiatant Professor

Mobile Cloud Technology for Maternal, Newborn and Child health

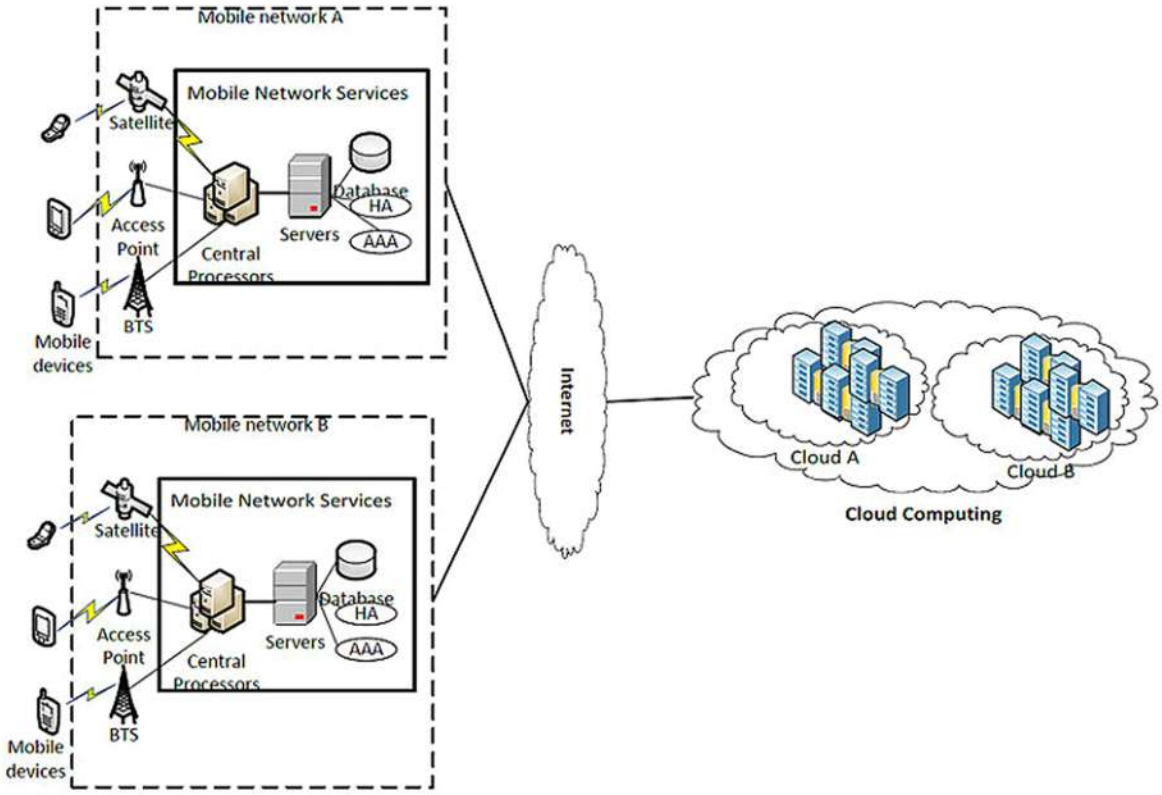
Maternal care is inadequate in India. Maternity and Childhood mortality rates are higher in rural areas than in urban areas. This is due to lack of knowledge in health sector and the people who are living in rural areas cannot understand the importance of growth monitoring, need of immunization, technique of low cost nutritious food preparation,significance of the breast feeding,importance of vaccinations, preparation of safe drinking water, gap between two children to maintain good health.The focus of our project is on Mother, Infant and Child Health. A Women having good Nutritional health status focus on health of her children. For this better Immunization, healthy foodpreparation, Oral Re-hydration and better rural livelihoods. To achieve the target of our proposal, implementation of Training equips with skilled persons to pursue new livelihoods and adapt technology to their need.

A woman with poor nutritional status like short physique, anemia andother micronutrient deficiencies, has a higher risk of obstructed labor, producing low-quality breast milk, having a baby with a low birth weight, death due to postpartum hemorrhage, and of morbidity for both herself and her baby. The main aim of this article is to reduce maternal mortality, child mortality, indisposition, dehydration and malnutrition rate and other related infectious diseases.

This paper will develop anovel system of Training, Creating health awareness for individuals using Mobile cloud computing technology. By using voice and short messaging service (SMS), wireless mobile communications like 3G and 4G systems, Bluetooth and GPS Technology.

PHCs generates the health reports of individuals and that reports can be submitted directly to the central cloud servers.Then Server generates responses to the individuals who is registered with cloud server, and PHC.These Interactive Alerts generates by using4G technology, server responses can be useful to the pregnant women and individuals for vaccine registration. It increases the coverage of vaccines and Extended Program on Immunization.

Mobile Cloud Computing Architecture



Mobile Cloud system comprises the following aspects: 1) Increase use and access the health services. 2) Minimize death of infants at birth. 3) Reduce the maternal morbidity and deaths.4)To enhance the capability of mother to look after the normal health and nutritional needs of the child through proper nutrition and health education. 5) To raise the nutritional status of mothers and children by the use of cheap, locally available and nutritious foods

6) To improve the nutritional and health standard of mother and children suffering malnutrition.7) Cloud-based web serveruses synchronization of health status for maternity, newborn and child's health in seamless and continuous monitoring and remote health tracking.

Sikhinam Nagamani
AssistantProfessor

Role of cloud computing in Smart Cities

Smart city means to collect all information resources from all information system supporting city operation and make them a bigger information sharing system under the support of the internet of things and cloud computing.

The key factor for the construction of smart city is to make the communication and information infrastructure more perfectly, construct information sharing platform, and make all the city activities participants receive higher efficiently and more intelligent convenience services from the construction of smart city and the relative intelligent system. A successful smart city system should have city information cloud, in which all the relative city services should operate in the unified cloud platform, and all the resources can be shared among different parts of the system, and provide the clients with intelligent service by construction of virtualization technology.

So a smart city system based on cloud computing should have a platform which can integrate all resources and make the resources shared among the system, and then accomplish the interoperation among "clouds". A smart city system should be comprised of infrastructure cloud, platform cloud and application cloud, correspond to infrastructure as a service, platform as a service and software as a service respectively.

As the lowest resources layer, the infrastructure cloud provides the necessary basic physical resources including server, network, storage devices to meet the information demand. The infrastructure cloud is the foundation for all services and the information sources.

The resource pool of infrastructure cloud is constructed by virtualization platform, and drew up by all the regulatory agencies of private cloud. In the end, we get the goal for standardization and collaboration. Lied between infrastructure cloud and application cloud, the platform cloud is the core layer and the key factors for information sharing. The function of platform layer is to manage regional cloud resources and integrate data resources from infrastructure cloud by the ways of data collection and data switching. After being integrated, the resources need to be reprocessed, numerous application tasks need to be dispatched, and then the resources can be used efficiently and safely. Application cloud lies in the top-level of the whole cloud framework, and is the implementation layer for information sharing. The main function of application cloud is to provide implementation platform. In this layer, we can develop all kinds of government affairs clouds to meet the requirements from city activities participants.

Source: The framework of smart city based on cloud computing

Mr. Michael Sadgun Rao Kona
Assistant Professor

Different Types of Bots

When over half of the traffic is from bots, an unprotected website will be treating good bots and bad bots equally. So, it becomes all the more important to know exactly who the bad bots are to effectively isolate and take action on them.

Bots with malicious intents are classified as bad bots. Malicious intents may be one or all of the following: content scraping, price scraping, form spam, skewing web analytics, credential stuffing, bid sniping, ticket scalping, and so on. A website trying to block or mitigate bot traffic must do so without stopping any of the good bots.

Types of good bots

Good bots are legitimate bots, the actions of which are beneficial to your website. These bots crawl your website for the purpose of SEO, aggregation, market intelligence/analytics and more. Selectively stopping one or all of these may be a decision from a business or industry perspective. However, inadvertently blocking these bots may reduce the visibility your website gets on search engines and other social platforms.

Monitoring Bots(e.g. Pingdom) -

Bots that are used to monitor uptime and system health of the websites. These bots periodically check and report on page load times, downtime duration, and so on.

Backlink checker bots (e.g. UASlinkChecker) -

These bots check the inbound URLs a website is getting so that marketers and SEO specialists can derive insights, and optimize the pages accordingly.

Social Network Bots(e.g. Facebook Bot) -

Bots that are run by social networking websites that give visibility to your website and drive engagement on their platforms.

Partner bots (e.g. PayPal IPN) -

Partner bots that are useful to websites that are transactional in nature.

Aggregator/feedfetcher bots (e.g. WikioFeedBot) -

Bots that collate information from websites and keeps the users or subscribers up-to-date on news, events or blog articles.

Search engine crawler bots

These bots or spiders crawl and index web pages, making them available on search engines, like Google, Bing, etc. You can control their crawl rates, and also specify rules in the robots.txt so that these search crawlers obey and follow when indexing your web pages.

Types of bad bots

Scraper bots -

These bots are executed with malicious intents - to steal content. Scrapers program these bots to scrape prices and product catalog so that they can undermine the pricing strategies of the target website. Competitors use third-party scrapers to perform this illegal act, and the unprotected website's competitive advantage is usurped by the scraper and competition.

Spam bots -

Spam bots primarily target community portals, blog comment sections and lead collection forms. They come in the middle of user conversations and insert unwanted advertisements, links and banners. This frustrates genuine users participating in forums and commenting on blog posts. Often times, these spam bots insert links that may be malicious in nature - like for example, phishing sites, targeting unsuspected users into divulging sensitive information like bank accounts and passcodes.

Scalper bots -

These bots target ticketing websites, and make bulk purchases. The modus operandi is to purchase hundreds of tickets as soon as the bookings open, and sell it to reseller websites at many times the original cost of the ticket. The original unprotected ticket selling website stands to lose genuine customers because of their inability to purchase tickets at the original cost.

K. Rajasekhar
Assistant Professor

DAWA KA HUB

ABSTRACT :

The problem with the present day medical system is that many people cannot able to check the availability of the required medicine. So there will be a lot of time consumption in checking the stores for the medicines one after the other until we get our required medicine. To overcome the drawbacks of present medical system we come up with a new mobile app which is an extension to the Apollo medical system, which only provides the medicine availability in the nearbyApollostores. But this proposed app is not restricted to a single store, where it links with many medical stores all over the India. So there by searching the medicine through this app, a GPS navigator will provide the path of the availability of the medicines in the nearby stores.

INTRODUCTION:

To design this application first we have to gather information from medical stores about various medicines and their availability. To do this we need to create a database for storing all these information and need to update this time to time. We use SQL server. And we use java programming for textboxes, buttons, checkboxes, scroll panes etc. for easy understanding so that the users can easily access the information they need to retrieve

The size of the market is huge as it is connecting medical stores in large number as many cities andvillages as possible, thereby increasing the size of the market and there will be no restriction of usage of this app in an effective manner.

People in metropolitan cities and normal cities to accept and habitat to this app so quickly as it is very difficult to visit store by store in search ofmedicine. So one can easily get adapted to this app in no time. In the era of digital make in India, this app will be more useful for all the people

BLOCK DIAGRAM:

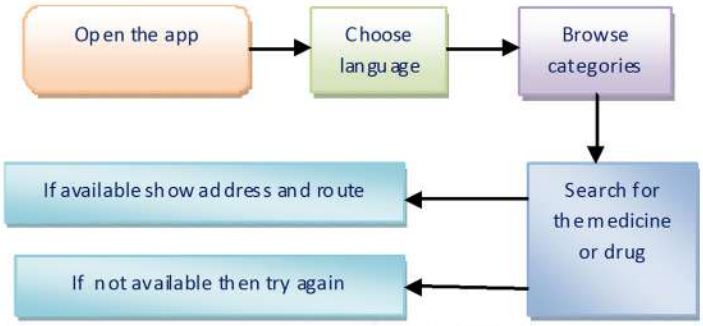


Fig 1. Blockdiagram

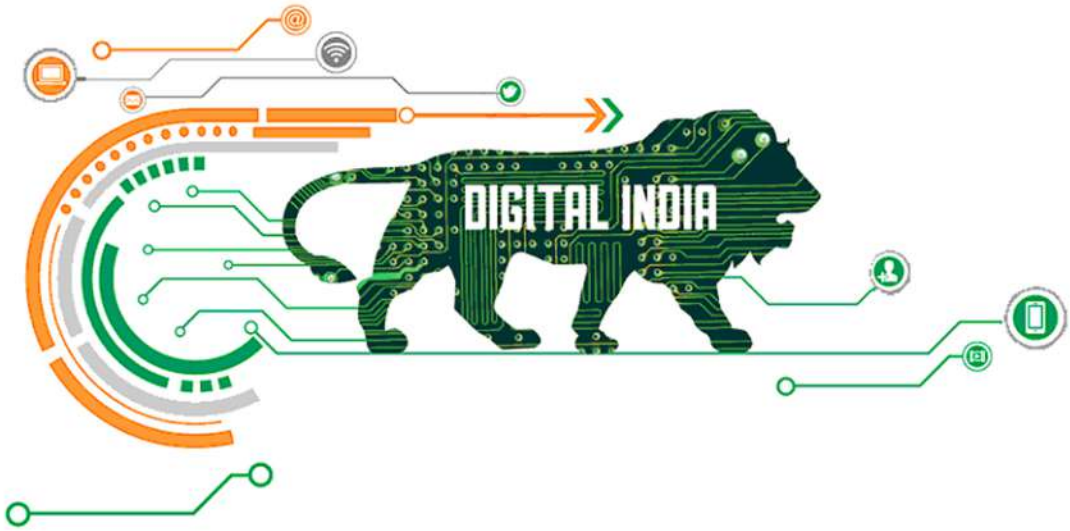
RESULTS:

The results obtained by implementing the software and hardware discussed in the above sections are presented in this section. The initial snapshot of this app welcome page is as shown in Fig 2.Next step is selection of language. It is as shown in the Fig3

Fig2. Welcome page

Fig3.Language selection

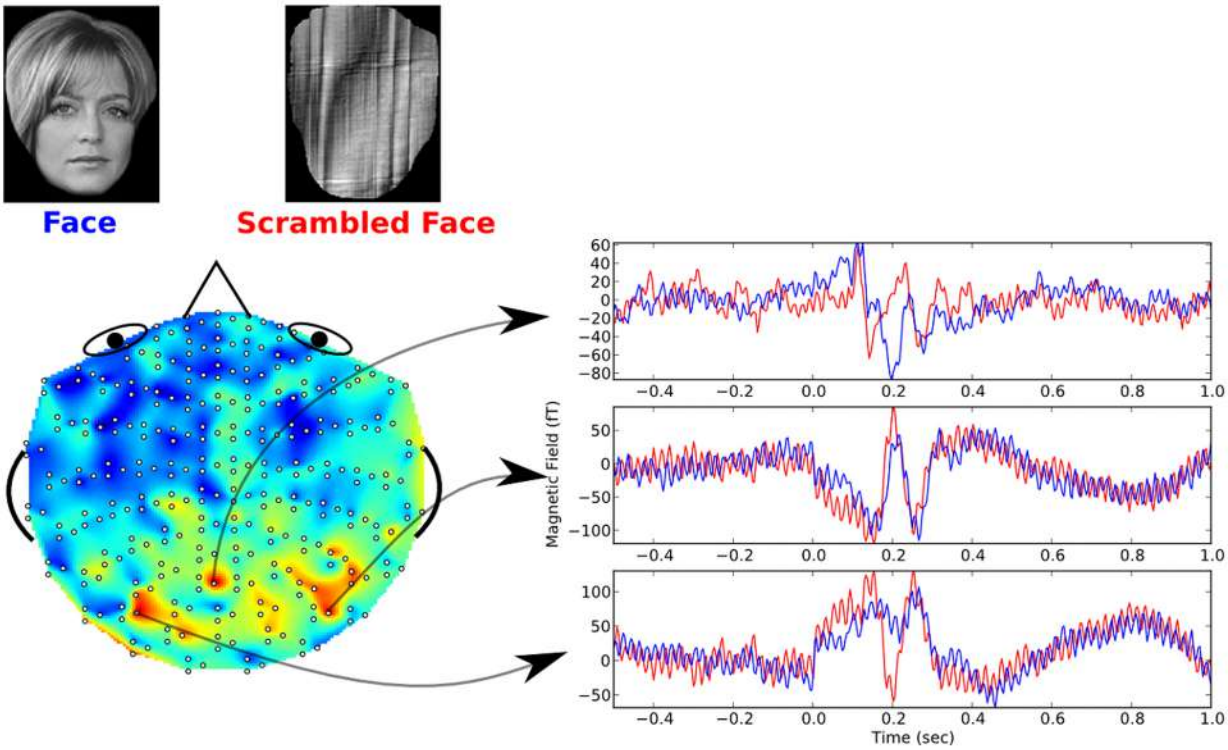
Future enhancement:



If this app came into existence no one can waste their time in searching the availability of medicines.

Ch.sambasiva rao
Assistant Professor

Shrink technique for highdimensionalspatiotemporal brain signal data



In neuroscience and brain computer interface (BCI)technology, automaticscrutiny of brain imagingdata plays a key role. The job is to discover thespatiotemporal neural signature of a task, whichcan be done by implementing segregation oncortical activations which arouse by diverse stimuli. Universal brain imaging means areElectroencephalography (EEG) andMagnetoencephalography (MEG). MEG evaluatesthe magnetic fields generated bymovement ofelectrical signals in the brain using highlyresponsive sensors placed across the scalp. Thenwe get these measurements in high dimensionalspatiotemporal dataDue to high-dimensionality and noise, the accuracyand speed of the signal scrutiny gets reduced.

In this study, we bring out two things one is uniquegraph signal processing theory and other isgraph based filtering algorithm (GBF).These twoabove approaches helps in performingdimensionalityshrink,andto build aconnectivitygraphwhich is bestsuitablefor brainimaging. GBF-based model canreduce the dimensionality in a high robust manneras it uses the underlying graph model. This graphmodel can be used as side information to bring outaccurate data. This side information (modelled as graph) can beused to produce accurate data as thiscontains highreliable datathan measurements, when themeasurements are depraved by noisy. We can gethigh reliable low-dimensional subspace byinvesting on the graph.

Therefore, here first we collect relaxing-state brainimaging signals and then on that we applyconnectivity scrutiny on thesignals. Then, after wegot relaxing-state connectivity graphweapplyLaplacian on the graph, and then by applyingdominant eigenvectors we develop lowdimensionalsubspace. Next, we take lowdimensionalsub-spaceto map the noisy task-statemeasurements (which arouse by visual stimuli)which leads to dimensionality reduction signalscalled as low-dimensional signal. Then on thisreduced-dimensional signal we apply SVMclassifier .If we apply SVM classifier then we cangetinsertion of task-related discriminative information.

This work is to concentrates on linear dimensionalityshrink .Here we also use graph

Laplacianeigenvectors to attain the low-dimensional data.Here to explore the usefulness of this approach, onbrain image signalswe use classification task. Thereis vast difference between the recommended GBFbasedapproach and Laplacian eigen-maps .Toget low-dimensional manifold we need Laplacianeigen-maps. This Laplacian eigen-maps consideronly the measurement. In Laplacian eigen-maps theside information is not represented. The productionof low-dimensional data uses a very uniquemechanism

SarvaniAnandarao
Assistant Professor

Object Recognition in Artificial Intelligence

Object recognition is the area of artificial intelligence (AI) concerned with the abilities of robots and other AI implementations to recognize various things and entities.

Object recognition allows robots and AI programs to pick out and identify objects from inputs like video and still camera images. Methods used for object identification include 3D models, component identification, edge detection and analysis of appearances from different angles.

Object recognition is at the convergence points of robotics, machine vision, neural networks and AI. Google and Microsoft are among the companies working in the area -- Google's driverless car and Microsoft's Kinect system both use object recognition.

Robots that understand their environments can perform more complex tasks better. Major advances of object recognition stand to revolutionize AI and robotics:

- MIT has created neural networks, based on our understanding of how the brain works, that allow software to identify objects almost as quickly as primates do.

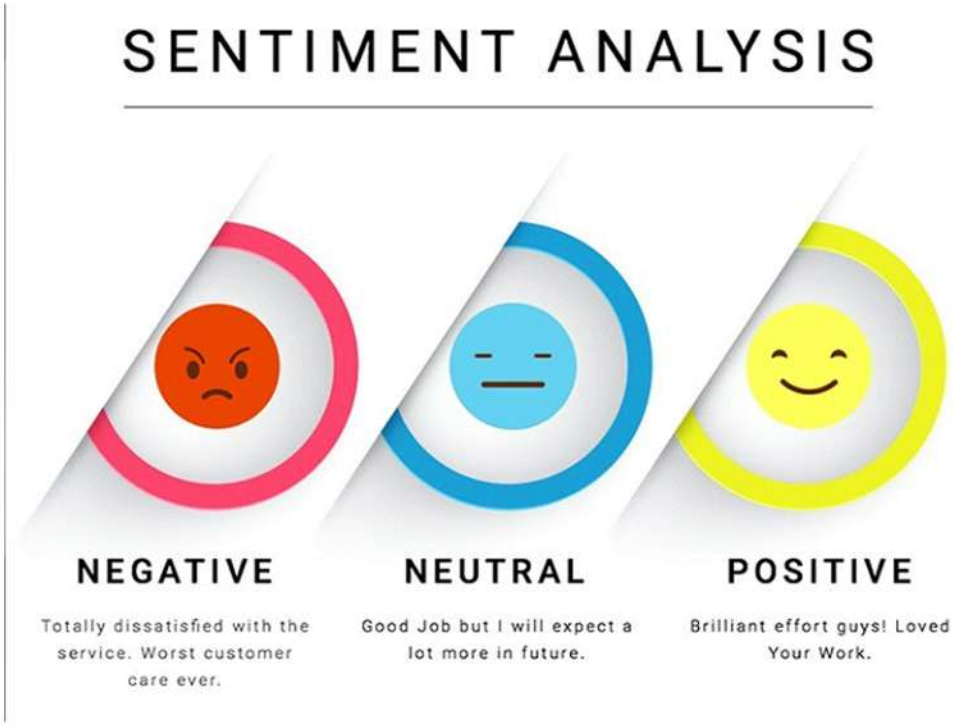
- Gathered visual data from cloud robotics can allow multiple robots to learn tasks associated with object recognition faster. Robots can also reference massive databases of known objects and that knowledge can be shared among all connected robots.

- Scientists at Brigham Young University have developed an object recognition algorithm that can learn to identify objects on its own. The Evolution-Constructed Features algorithm, as it's called, can make decisions about what characteristics of an object are relevant to its identification.

Concerns about the potential of object recognition include fears that advertisers and other interested entities will use the technology to mine the increasing number of images posted online and gather from them the personal information of individuals.

K.RAVITEJA
Assistant Professor

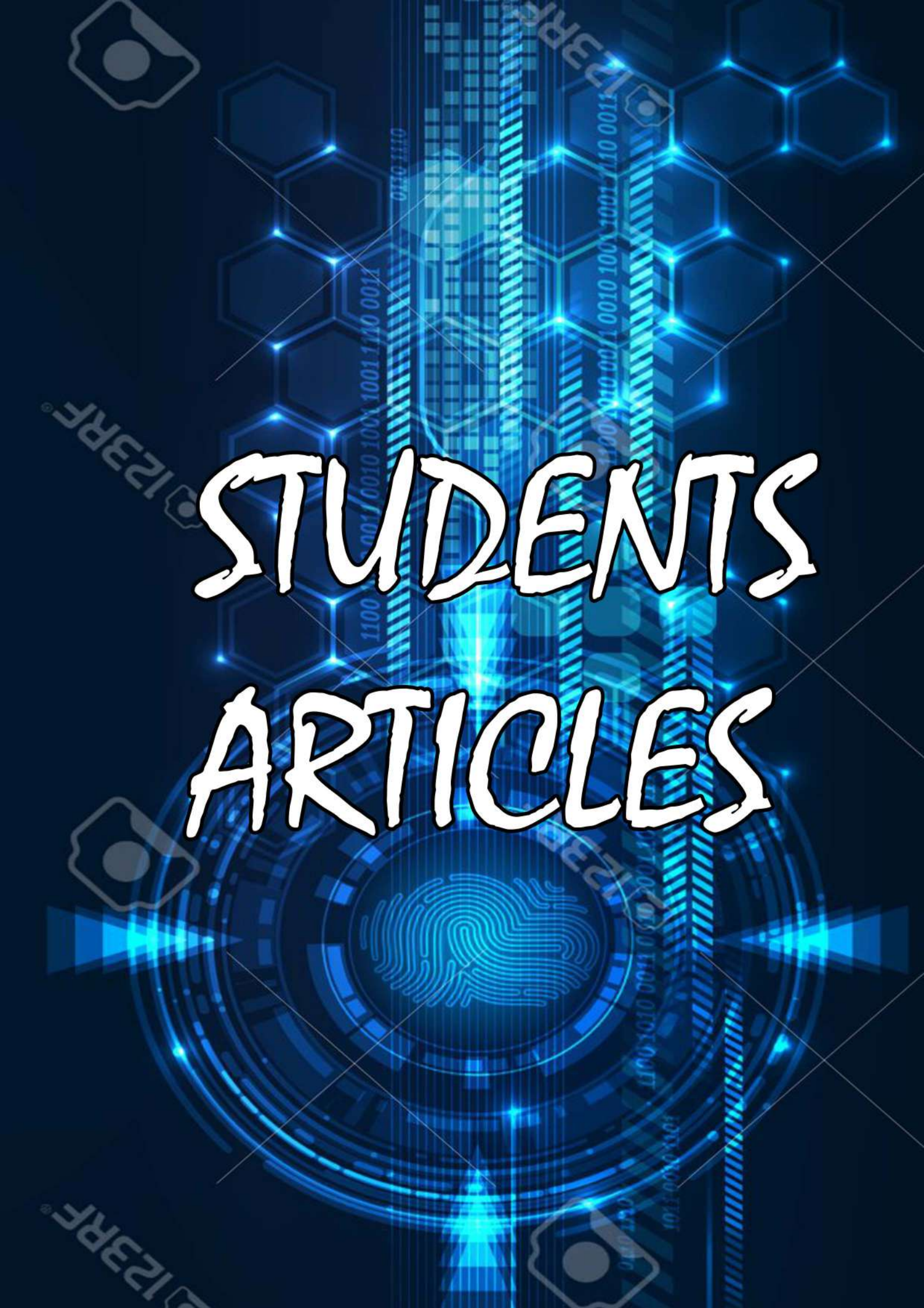
Opinion mining and sentiment analysis



An important part of our information-gathering behaviour has always been to find out what other people think. With the growing availability and popularity of opinion-rich resources such as online review sites and personal blogs, new opportunities and challenges arise as people now can, and do, actively use information technologies to seek out and understand the opinions of others. The sudden eruption of activity in the area of opinion mining and sentiment analysis, which deals with the computational treatment of opinion, sentiment, and subjectivity in text, has thus occurred at least in part as a direct response to the surge of interest in new systems that deal directly with opinions as a first-class object.

This survey covers techniques and approaches that promise to directly enable opinion-oriented informationseeking systems. Our focus is on methods that seek to address the new challenges raised by sentimentaware applications, as compared to those that are already present in more traditional fact-based analysis. We include material on summarization of evaluative text and on broader issues regarding privacy, manipulation, and economic impact that the development of opinion-oriented information-access services gives rise to. To facilitate future work, a discussion of available resources, benchmark datasets, and evaluation campaigns is also provided.

Ms.KallamHemanthi
Assistant Professor


STUDENTS
ARTICLES

SKINPUT TECHNOLOGY

The Microsoft company have developed Skinput, a technology that appropriates the human body for acoustic transmission, allowing the skin to be used as an input surface. In particular, we resolve the location of finger taps on the arm and hand by analyzing mechanical vibrations that propagate through the body.

We collect these signals using a novel array of sensors worn as an armband. This approach provides an always available, naturally portable, and on-body finger input system. We assess the capabilities, accuracy and limitations of our technique through a two-part, twenty-participant user study. To further illustrate the utility of our approach, we conclude with several proof-of-concept applications we developed.

The primary goal of Skinput is to provide an alwaysavailable mobile input system - that is, an input system that does not require a user to carry or pick up a device. A number of alternative approaches have been proposed that operate in this space. Techniques based on computer vision are popular These, however, are computationally expensive and error prone in mobile scenarios (where, e.g., non-input optical flow is prevalent).

Speech input is a logical choice for always-available input, but is limited in its precision in unpredictable acoustic environments, and suffers from privacy and scalability issues in shared environments. Other approaches have taken the form of wearable computing.

This typically involves a physical input device built in a form considered to be part of one's clothing. For example, glove-based input systems allow users to retain most of their natural hand movements, but are cumbersome, uncomfortable, and disruptive to tactile sensation. Post and Orth present a "smart fabric" system that embeds sensors and conductors into abric, but taking this approach to always-available input necessitates embedding technology in all clothing, which would be prohibitively complex and expensive.

Mr.Ch.Rajkamal
15761A1208

WORLD OF SMARTPHONES

A Smartphone is a mobile phone which works on a mobile operating system having advance computer capability and connectivity than a feature phone.

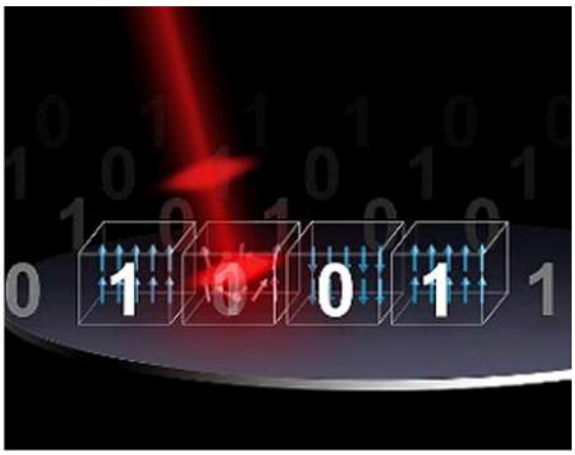
Smartphones have made a major change in the today's world and we, human beings are also becoming dependent on them. Smartphones can handle our day to day tasks which includes remembering important dates, tasks, schedules and much more. So, smartphones have made a major impact on our human way of living. Smartphones have made our life simpler, better and we can stay connected to our loved ones at almost no cost.

- The phones that can install third-party applications, have better integration with the device's Operating System (OS) and hardware than the other feature phones.
- The first phone to feature cellular + Personal Digital Assistance was developed by IBM in 1992 naming Simon Personal Communicator which could be referred as 'Smartphone'.
- Later in 1996 Nokia released Nokia 9000 which was also a PDA device with a QWERTY Keypad with it.
- Later then, Operating Systems introduced and OS like Palm OS, BlackBerry OS, Windows CE.

B.Bhargavi
(15761A1205)

OPTICAL STORAGE TECHNOLOGY

Researchers of the Institute of Photonic Integration of the Technical University of Eindhoven, the Netherlands have revealed new technology to store data. Their technology uses laser pulses and combines the advantages of light and magnetic storage. The researchers claim their technology is revolutionary and is 1,000x faster than any other currently available storage technology



Researchers Mark Lalieu, Reinoud Lavrijs and Bert Koopmans have published their findings in Nature. They explain that their technology works by ultra-short laser pulses that make it possible to storage data directly in magnetic storage in a very fast and power-efficient way.

Currently, disk access times are measured in milliseconds. The new technology uses laser pulses that are measured in femtoseconds. To understand how fast such a pulse is compared to current access times, a millisecond is 1,000,000,000,000 femtoseconds. Each pulse changes the magnetic direction of a very tiny region of magnetic material. Such a region is called a magnetic domain.

By changing the direction of the magnetic domain with laser pulses, it's possible to store bits, represented as either 1 or 0.

The magnetic material of which the magnetic domains are made, is what makes the technology different. This material is called synthetic ferrimagnet and with this material it's possible to store a single bit with a single laser pulse lasting a femtosecond

which makes writing the data both energy-efficient and fast. Researcher Mark Lalieu explains, "This way of storing data is about 100 to 1,000 times faster than possible with today's technology. Besides that, because the optical information is stored in magnetic bits, without requiring any immediate energy-consuming electronics, this has enormous potential for future usage in photonic computer chips."

The researchers combined the laser with so-called racetrack memory. This is a magnetic wire where data, in the form of magnetic bits, is transported with the help of an electric current. In this memory, the magnetic bits are continuously written by laser pulses. Once the bits are written, they are immediately moved over the wire through electric current. When the written bit is moved, it frees space, so the system can store another bit, generating a continuous stream of data.

The researchers explain that their method of 'on the fly' copying of data using the magnetic racetracks, is like "jumping back and forth between two high-speed trains, instead of transferring to another train on a station."

"You can imagine how much faster and power-efficient it is," the researchers add

In their current research project they used micro wires, in order to work with computer chips these wires need to be shrunk to nano scale.

The researchers are also working on a way of reading (magnetic) data with light/lasers.

We don't show comment's on news stories. But you are very welcome to join the discussion on this topic on our forum.

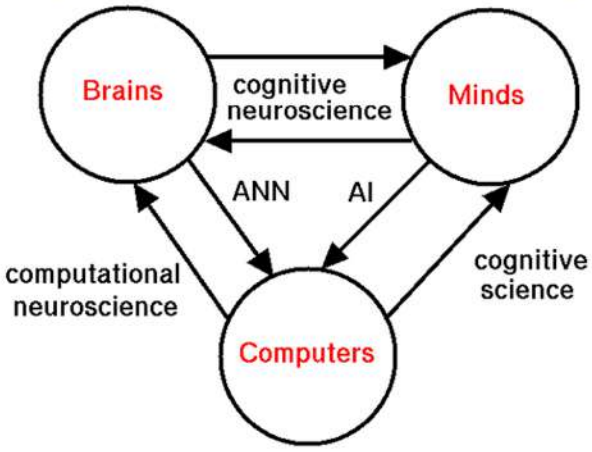
G.Nikitha.
(15761A1218)

MIND READING COMPUTER

Drawing inspiration from psychology, computer vision and machine learning, the team in the Computer Laboratory at the University of Cambridge has developed mind-reading machines - computers that implement a computational model of mind-reading to infer mental states of people from their facial signals.

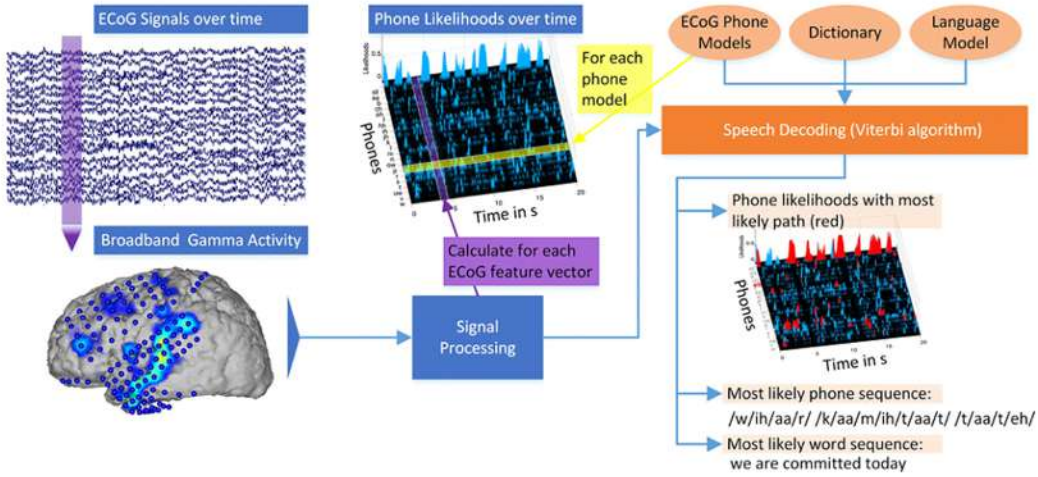
Using a digital video camera, the mind-reading computer ppt system analyzes a person's facial expressions in real time and infers that person's underlying mental state, such as whether he or she is agreeing or disagreeing, interested or bored, thinking or confused.

Disciplines that relate Brains, Minds, and Computers



The mind-reading computer system presents information about your mental state as easily as a keyboard and mouse present text and commands. Imagine a future where we are surrounded with mobile phones, cars and online services that can read our minds and react to our moods. How would that change our use of technology and our lives? We are working with a major car manufacturer to implement this system in cars to detect drivermental states such as drowsiness, distraction and anger.Current projects in Cambridge are considering further inputs such as body posture and gestures to improve the inference. We can then use the same models to control the animation

of cartoon avatars. We are also looking at the use of mind-reading to support on-line shopping and learning systems.



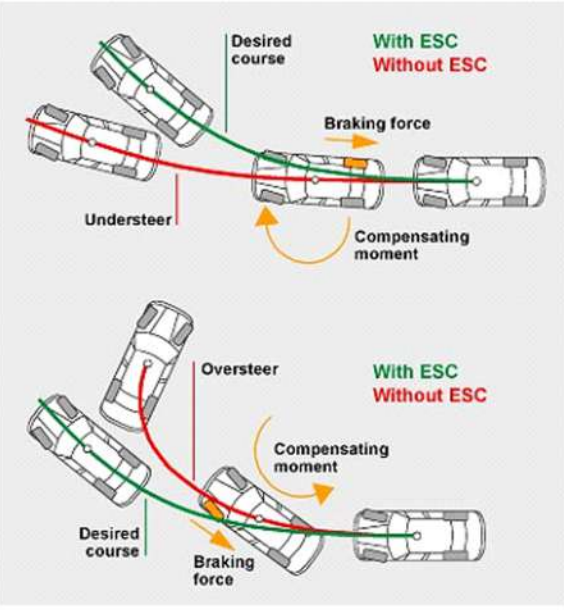
The mind reading actually involves measuring the volume and oxygen level of the blood around the subject's brain, using technology called functional near-infrared spectroscopy.
Wearing the fNIRS sensor, experimental subjects were asked to count the number of squares on a rotating onscreen cube and to perform other tasks. The subjects were then asked to rate the difficulty of the tasks, and their ratings agreed with the work intensity detected by the fNIRS system up to 83 percent of the time.

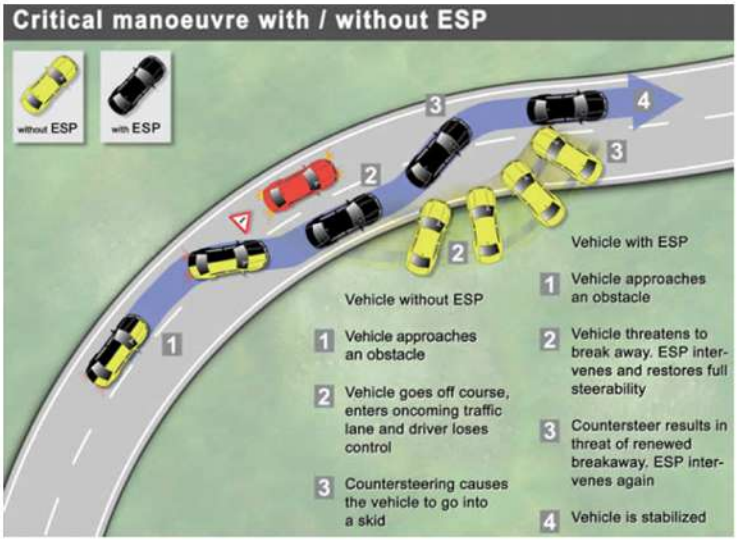
J.KRISHNAVENI.
15761A1222.

ELECTRONIC STABILITY CONTROL

Electronic stability control (ESC), also referred to as electronic stability program (ESP) or dynamic stability control (DSC), is a computerized technology that improves a vehicle's stability by detecting and reducing loss of traction (skidding). When ESC detects loss of steering control, it automatically applies the brakes to help "steer" the vehicle where the driver intends to go. Braking is automatically applied to wheels individually, such as the outer front wheel to counter oversteer or the inner rear wheel to counter understeer. Some ESC systems also reduce engine power until control is regained. ESC does not improve a vehicle's cornering performance; instead, it helps to minimize the loss of control.

According to the U.S. National Highway Traffic Safety Administration and the Insurance Institute for Highway Safety in 2004 and 2006 respectively, one-third of fatal accidents could be prevented by the use of the technology. ESC has been mandatory in new cars in the U.S and the European Union since 2012 and 2014, respectively.





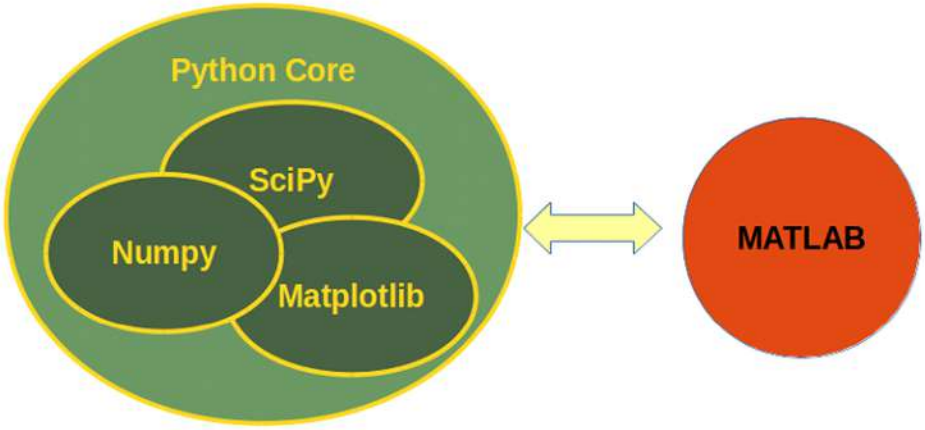
In 1983, a complete production Four-wheel electronic anti-skid control was introduced on the Toyota Crown. In 1987, Mercedes-Benz, BMW and Toyota introduced their first traction control systems. Traction control works by applying individual wheel braking and throttle to keep traction while accelerating but, unlike the ESC, it is not designed to aid in steering.

In 1990, Mitsubishi released the Diamante (Sigma) in Japan. It featured a new electronically controlled active trace & traction control system (the first integration of these two systems in the world) that Mitsubishi developed (see Mitsubishi AWC). Simply named TCL in 1990, the system has now evolved into Mitsubishi's modern Active Skid and Traction Control(ASTC) system. Developed to help the driver maintain the intended line through a corner; an onboard computer monitored several vehicle operating parameters through various sensors. When too much throttle has been used when taking a curve, engine output and braking are automatically regulated to ensure the proper line through a curve and to provide the proper amount of traction under various road surface conditions. While conventional traction control systems at the time featured only a slip control function, Mitsubishi's newly developed TCL system had a preventive (active) safety function which improved the course tracing performance by automatically adjusting the traction force (called "trace control") thereby restraining the development of excessive lateral acceleration while turning. Although not a 'proper' modern

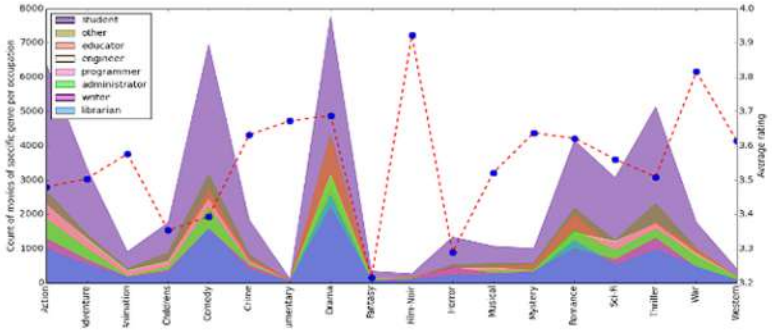
J.Manohar Reddy
15761A1223

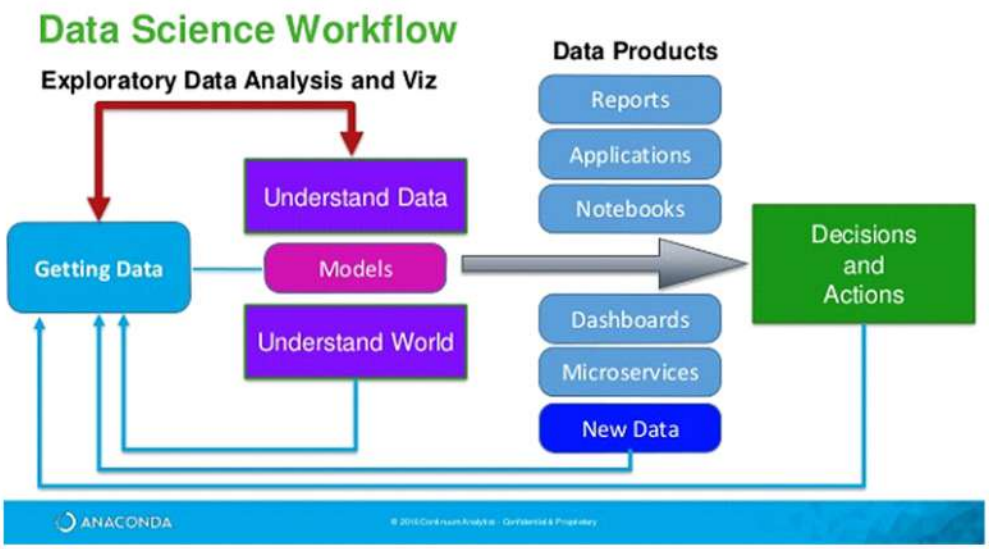
PYTHON WITH DATA SCIENCE

Python is really a great tool, and is becoming an increasingly popular language among the data scientists. The reason being, it easy to learn, integrates well with other databases and tools like Spark and Hadoop. Majorly, it has great computational intensity and powerful data analytics librariy.Python to perform the full life-cycle of any data science project.



Applied DataScience with Python and is intended for learners who have basic python or programming background, and want to apply statistics, machine learning, information visualization, social network analysis, and text analysis techniques to gain new insight into data. SciPy is the scientific equivalent of NumPy, offering tools and techniques for analysis of scientific data. Statsmodels focuses on tools for statistical analysis.





Python is free, open-source software, and consequently anyone can write a library package to extend its functionality. Data science has been an early beneficiary of these extensions, particularly Pandas, thebig daddy of them all.Pandas is built on top of NumPy, one of the earliest libraries behind Python's data science success story. NumPy's functions are exposed in Pandas for advanced numeric analysis.

J.HarshaVardhan Reddy
15761A1224

DIGITAL SCENT TECHNOLOGY

Until now, online communication involved only two of our senses, sense of sight & sense of hearing. Soon it will involve the third, the sense of smell using a nose. Digital scent technology is the main application of e-nose. With digital scent technology, it is possible to sense, transmit & receive smell through internet.

There is complete software and hardware solution for it. When applied to communications, scent becomes a new information channel. It allows us to perceive products and irate a previously unimagined emotionality and product credibility.

Scents extend the myriad of multimedia possibility towards a new level. Scent communication will be one of the most important information tools of the future.There are various causes due to which computers have their own stand in our life. It provides a very good facility of fast processing, sound and picture. The virtual reality concept has provided very good features to the computer systems. The concept of virtual reality is introduced by the computer programmers to provide more attachments to the user. There are several concepts of the virtual reality that are available such as digital smell, virtual theater, electronics hand gloves, multipoint surround sound system, 3d goggles.

The sense of smell is closely tied to memory and emotion, making scent a powerful way to reinforce ideas. "If a picture is worth a thousand words, a scent is worth a thousand pictures."

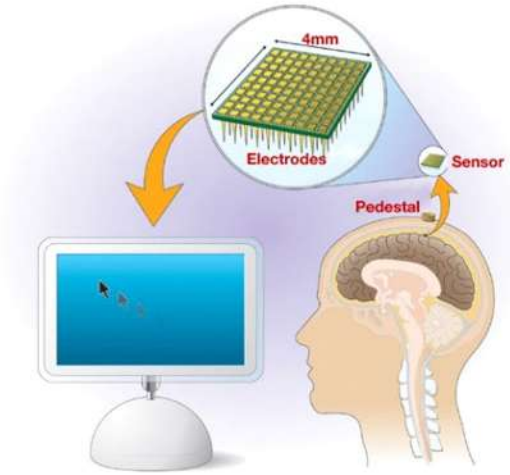
A Scent has a strange power over human beings. It can create a mood, such as foreshadowing or ambiance. It can intensify emotions such as fear or love. It can also give the sensation of virtual reality and suspension of disbelief.

"The Sense of smell is closely tied to memory and emotion, making scent a powerful way to reinforce ideas".There are several streams over which this digital smell is used, Such as over the television, theater and the web. Hence we conclude that this digital smell will revolutionized the world. And at every place we will require this device, such as for scented mail, scented movies, scented songs we must requires this device. This device will become our need in future.

Monika Mettela
15761A1234

BRAIN GATE TECHNOLOGY

BrainGate is a brain implant system developed by the bio-tech company, Cyber kinetics in conjunction with the Department of Neuroscience at Brown University. The development of the braingate system brain-computer interface is to enable those with severe paralysis and other neurological conditions to live more productively and independently. The computer chip, which is implanted into the brain, monitors brain activity in the patient and converts the intention of the



WORKING :

The basic elements of BrainGate 1. The chip: A four-millimeter square silicon chip studded with about 100 hair-thin microelectrodes is embedded in the primary motor cortex-the region of the brain responsible for controlling movement. 2. The connector: When somebody thinks ,move cursor up and left his cortical neurons fire in a distinctive pattern the signal is transmitted through the pedestal plug attached to the skull. 3. The converter: The signal travels to an amplifier where it is converted to optical data and bounced by fiber optic cable to a computer. 4. The computer: Brain gate learns to associate patterns of brain activity with particular imagined

movements up, down, left, right and to connect those movements to a cursor.

APPLICATIONS:

The brain gate neural interface system is an investigational medical device that is being developed to improve the quality of life for physically disabled people by allowing them to quickly and reliably control a wide range of devices by thought, including computers, environmental controls, robotics and medical devices

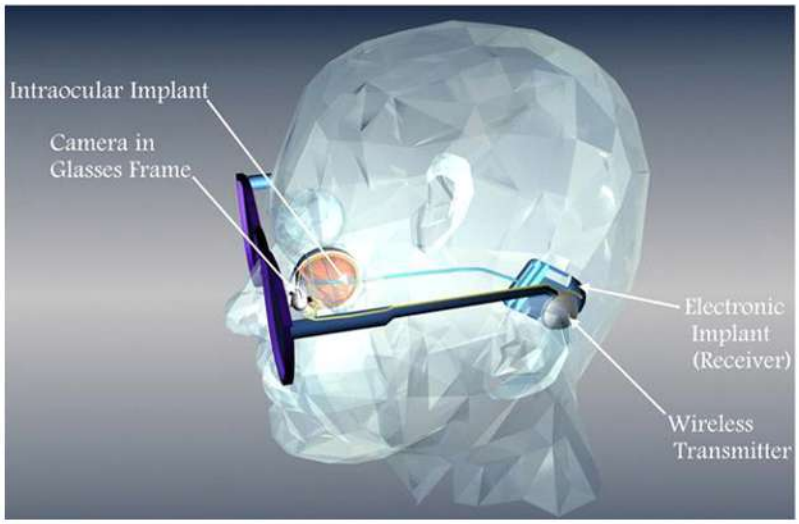
ADVANTAGES :

The brain crate system is based on cyber kinetics platform technology to sense, transmit analyze and apply the language of neurons. The Brain Gate Neural Interface System is being designed to one day allow the interface with a computer and / or even faster than, what is possible with the hands of a person. The Brain Gate System may offer substantial improvement over existing technologies.

CONCLUSION: The idea of moving robots or prosthetic devices not by manual control, but by mere thinking (i.e., the brain activity of human subjects) has been a fascinated approach. Medical cures.

Priyanka.p
15761A1238

ARTIFICAL EYE



An artificial eye is a prosthesis which is used to replace a missing or damaged eye.In order to accomplish the goal of creating a visual prosthesis, scientists had to develop a camera which could interact with the brain by stimulating the optic nerve. An ocular prosthesis or artificial eye is a type of craniofacial prosthesis that replaces an absent Natural eye following an enucleating, evisceration, or orbital exenterating. The prosthesis fits Over an orbital implant and under the eyelids. Belonging to the community of engineers there is no frontier that we cannot conquer. If scientists give birth to ideas, then it is we engineers who put life into those ideas. Today, we talk of artificial intelligence that has created waves of interest in the field of robotics. When this has been possible, then there is a possibility for artificial vision. `Bionic eye' also called a Bio Electronic eye.

A bionic eye works by stimulating nerverwhich are activated by electricalimpulses.In this case the patient has a smalldeviceimplanted into the body thatcan receiveradio signals and transmitthose signals tobrain through nerves andcan interpretthe image. One of the mostdramatic applications of bionics is thecreation of artificial eyes. Early efforts used silicon-based photo detectors, but silicon istoxic to the human body and reacts unfavorably with fluids in the eye.

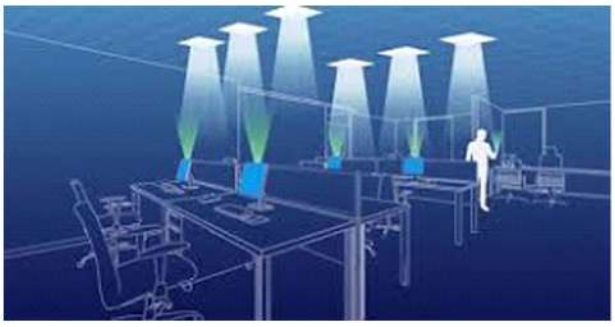
Shaik.Fathima
15761A1247

Li-Fi : The Future Of Internet

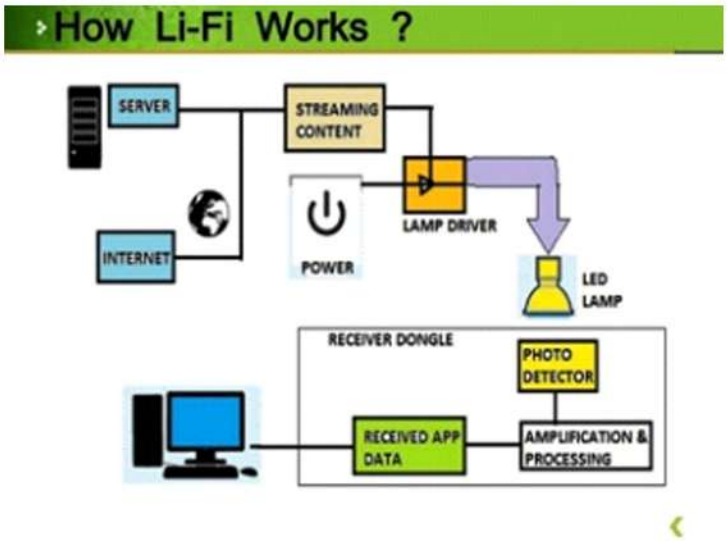
Imagine a time when each of the lightbulbs in your house is a source of Internet. Imagine a scenario where, standing under a lightbulb for 1 minute, you would have downloaded around 5 movies in HD. Sounds like a dream, right? But thanks to Li-Fi technology, this dream will soon turn into reality. With this new technology, we can reimagine the role light plays in the universe.

What is Li-Fi?

Li-Fi stands for Light Fidelity and is a Visible Light Communications (VLC) system which uses light to send wireless data embedded in its beam. A Li-Fi enabled device converts the beam of light into an electrical signal. The signal is then converted back into data. The term was coined by German physicist Harald Haas during a TED Talk in 2011. He envisioned the idea of using lightbulbs as wireless routers.



LiFi bulbs are outfitted with a chip that modulates the light imperceptibly for optical data transmission. LiFi data is transmitted by the household LED bulbs and received by photoreceptors. If implemented meticulously, Li-Fi systems can reach transmission speeds which are upto 100 times faster (more than 1 Gigabit per second) than the current traditional Wi-Fi which works on radio waves.



Architecture Of Li-Fi System

Li-Fi which can be the future of data communication appears to be a fast and cheap optical version of Wi-Fi. It uses visible light of electromagnetic spectrum between 400 THz and 800 THz as optical carrier for data transmission and illumination.

The main components of a basic Li-Fi system contains the following:
a) A high brightness white LED which acts as transmission source.
b) A silicon photodiode with good response to visible light as the receiving element.

WORKING

LED light bulbs can be dipped and dimmed, up and down at extremely high speeds, without being visible to the human eye. The tiny changes/pulses in the rapid dimming of LED bulbs is then converted by the 'receiver' into electrical signal. The signal is then converted back into a binary data stream that we would recognise as web, video and audio applications that run on internet enabled devices.

Li-Fi system connecting devices in a roomPros And Cons Compared To Wi-FiPros

 The most astounding feature of Li-Fi is that unlike Wi-Fi, Li-Fi does not interfere with radio signals, making it an added advantage in terms of internet speeds where both Li-Fi and Wi-Fi are to be used, whereas Wi-Fi interferes with the nearby access points (routers). Not to mention, the spectacularly high speeds of Li-Fi over Wi-Fi.

2. Li-Fi is more secure and offers additional privacy because light is blocked by the walls and hence provides more secure data transfer. In case of Wi-Fi, the network is prone to hacking as it has a wider reach and radio frequency signal cannot be blocked by the walls. Which means that it's harder for neighbours to get on your internet without paying for it.

Cons

The coverage distance of Li-Fi is 10 metres while it is 32 metres for a Wi-Fi system.

Li-Fi technology cannot be deployed outdoors in sunlight or in any unstable conditions, so it cannot potentially work in darkness in the absence of LED bulbs. Besides, more LED brightness added to the time we already spend looking at screens isn't great for our eyes, especially if those LEDs will technically never be off. You may not be able to receive internet service if there's a wall between you, your light and your LiFireceiver.Areas Of ApplicationMilitary

Li-Fi coverage can be limited to a small lit area such as a tent. Thus it can limit access to sensitive information under specific light and in areas where mobile phones can't be used such as ammunition dumps.

Underwater Communication

An underwater internet connection is what will set Wi-Fi and Li-Fi apart. Light can travel through water unlike Wi-Fi's radio signals that will be swallowed up by the water. This could change the way underwater vehicles communicate with one another.

Traffic Lights

The LED bulbs in traffic lights could provide drivers with weather conditions and traffic updates while they wait at a traffic light.

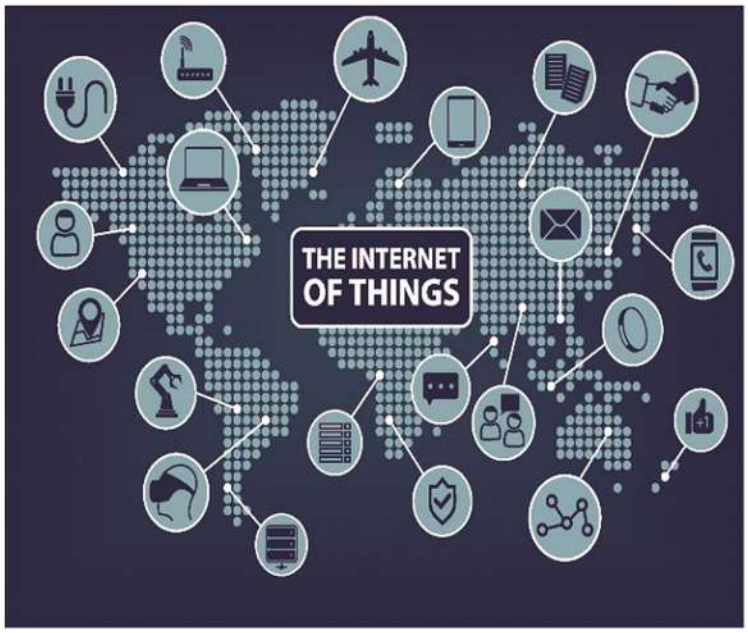
Future Of Li-Fi

Each of our devices will be connected to the internet, as we move into the Internet of Everything era. Is Wi-Fi upto the task of handling all that internet traffic alone? The short answer is no.The company started by Professor Herald Haas in 2012 known as pureLifi is performing experiments and enormously researching the advancements in this field. A startup known as Velmenni is at the forefront of this technological revolution in India. There is certainty of development of future applications of the Li-Fi which can be extended to different platforms and various walks of human life. This technology has the potential to become mainstream and ubiquitous, so gear up for it!

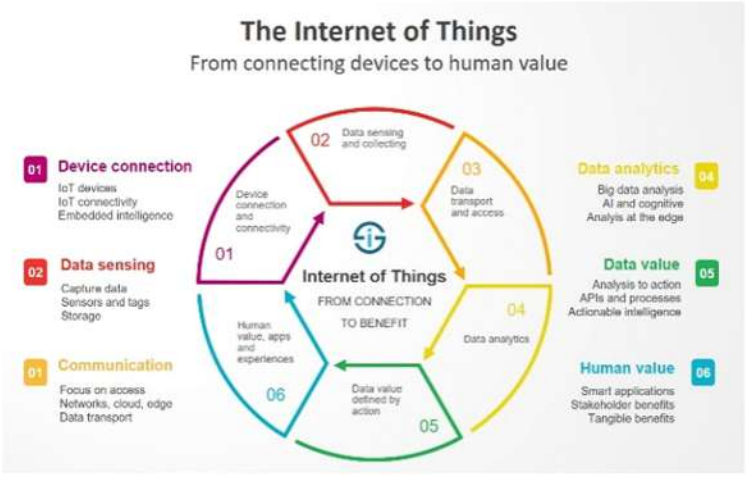
Sk.Md.Sajid
(15761A1248)

INTERNET OF THINGS

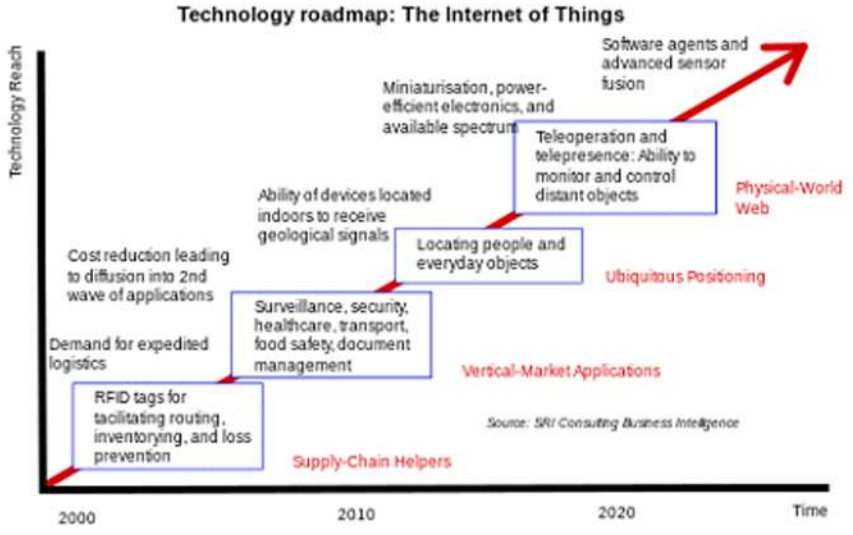
We're entering a new era of computing technology that many are calling the Internet of Things (IoT). Machine to machine, machine to infrastructure, machine to environment, the Internet of Everything, the Internet of Intelligent Things, intelligent systems—call it what you want, but it's happening, and its potential is huge. We see the IoT as billions of smart, connected "things" (a sort of "universal global neural network" in the cloud) that will encompass every aspect of our lives, and its foundation is the intelligence that embedded processing provides.



The creativity of this new era is boundless, with amazing potential to improve our lives. The following thesis is an extensive reference to the possibilities, utility, applications and the evolution of the Internet of Things.The Internet of things (IoT) is the network of physical devices, vehicles, and other items embedded with electronics software, sensors, actuators, and network connectivity which enable these objects to collect and exchange data. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. Experts estimate that the IoT will consist of about 30 billion objects by 2020.



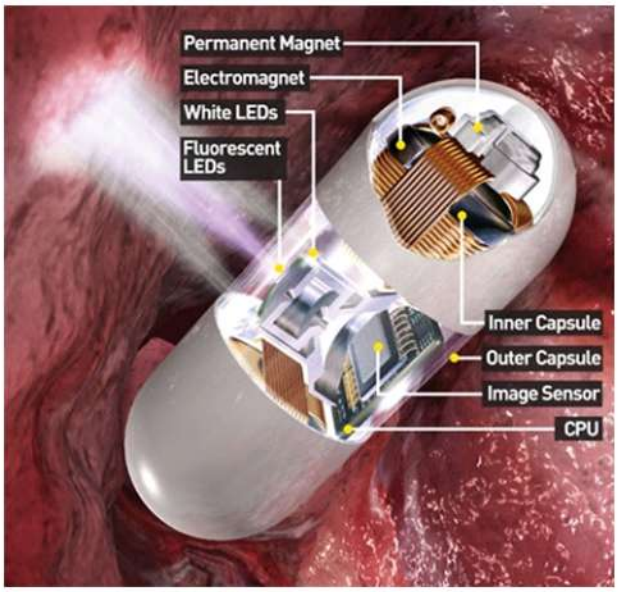
The concept of the Internet of things became popular in 1999, through the Auto-ID Center at MIT and related market-analysis publications. Radio-frequency identification (RFID) was seen by Kevin Ashton (one of the founders of the original Auto-ID Center) as a prerequisite for the Internet of things at that point. Ashton prefers the phrase "Internet for things." If all objects and people in daily life were equipped with identifiers, computers could manage and inventory them. Besides using RFID, the tagging of things may be achieved through such technologies as near field communication, barcodes, QR codes and digital watermark.



T.L.SUDHEER
15761A1250

PILL CAMERA

The aim of technology is to make products in a large scale for cheaper prices andincreased quality. The current technologies have attained a part of it but themanufacturing technology is at macro level. The future lies in manufacturing productright from the molecular level. Research in this direction started way back in eighties. At that time manufacturing at molecular and atomic level was laughed about. But due toadvent of nanotechnology we have realized it to a certain level. One such productmanufactured is pill camera, which is used for the treatment of cancer, ulcer andanaemia. It has made revolution in the field of medicine.This tiny capsule can pass through our body, without causing any harmit. It takes pictures of our intestine and transmits the same to the receiver of the computeranalysis of our digestive system.



This process can help tracking any kind of disease relatedto digestive system. Also we have discussed the drawbacks of pill camera and howthese drawbacks can be overcome by using Grain sized motor and bi-directional wirelesselementary capsule .Besides this we have reviewed the process of manufacturing Some other important applications are also discussed along withtheir potential impacts on various fields.

V.Dedipya
15761A1258


Departments
Events

PLACEMENTS DETAILS

S.No	H.T No	Name of the Student	Selected Company
1	13761A1218	J. KEERTHI SUDHA	TCS
2	13761A1234	M. LEELA REDDY	
3	13761A1237	P. HARI CHANDANA	
4	13761A1253	U. RAMYA	
5	13761A1201	J. ALEKHYA	TECH MAHINDRA
6	13761A1203	B. SAI DURGA SRAVANI	
7	13761A1224	K. VINAYA SREE	
8	13761A1239	P. PADMA SRI	
9	13761A1224	K. VINAYA SREE	BYJU'S THINK & LEARN
10	13761A1229	K. PADMA PRIYA	KONY LABS
11	13761A1204	B. NAVEEN	CSG SOLUTIONS
12	13761A1204	B. NAVEEN	ObjectWin Technology
13	13761A1206	CH. NIREESHA	ACHALA SOLUTIONS
14	13761A1229	K. PADMA PRIYA	
15	13761A1206	CH. NIREESHA	VEE TECHNOLOGIES
16	13761A1231	M. RADHIKA	MIRACLE
17	13761A1257	V. RANI MOUNIKA	ALLSEC TECHNOLOGIE
18	13761A1211	D. NANDINI	
19	13761A1213	G. BHARATHI	
20	13761A1248	SK.SALMA	
21	13761A1251	Sk. ZAHEER BASHA	
22	13761A1204	B. NAVEEN	JUST DIAL
23	13761A1244	P. BHARGAV KUMAR	
24	13761A1251	SK. ZAHEER BASHA	

INTENSHIP DETAILS

Conpany Name	Company Sector	Branch	No of Students
Sell Globally Infotech	Private	VIJAYAWADA	3
Sell Globally Infotech	Private	Hyderabad	6
iSeef Technologies	Private	Hyderabad	3
Web Tek Labs	Private	Hyderabad	33
P.V Technosoft	Private	Hyderabad	1
Blue Jeans Network India PvtLtd	Private	Bangalore	1
Advanced Training Institute for Electronics and Processing Instrumentation	Public	Hyderabad	1
vizag steel plant	Public	visakhapatnam	2
sarja technologies	Private	Hyderabad	1
BSNL	Public	VIJAYAWADA	2
CDST IT solutions	Private	VIJAYAWADA	1
Elite Engineering Company	Private	VIJAYAWADA	1

Workshop on Problem Solving and Data Structures

A Five day workshop on Problem Solving and Data Structures for Employability Enhancement on 30th August to 3rd September 2016 organized by **CSI LBRCE STUDENT CHAPTER.**

Description:

The workshop is mainly aims to improve the Problem Solving and Data Structures for Employability Enhancement for applying in any programming language. It also helps the students to write the code in an optimized way. As it is a common sense driven approach students got introduced different ways of writing code for a given problem. This seminar is also made students " How to improve efficiency of a program by using basic mathematical principles and reducing time complexities and space complexities" and write code for any problem without any fear.

Dates: 30-08-2016 to 03-09-2016.

Resource Person from Top Freshers company

Director Dr. E. V. Prasad addressed the students that the importance of Problem Solving and Data Structures for Employability Enhancement in real world problems.
LBRCE Student branch Counselor, Dr. S. Naganjaneyulu, Professor, Department of IT welcomed the resource person of the day and given briefing of the event and advised the students to make use of session effectively.

Dr. D. Nagaraju, professor and HOD of IT department, mentioned the importance of programming for CSE, & IT students and suggested students to get improved their knowledge on programming.

Dr. N. Ravi Shankar, Professor and HOD of CSE, described that the event is designed with an aim to write simple and readable code and how the programming will help the students to get selected in the software industry.

Resource person, concentrated more on eliminating fear on programming and also delivered a talk on "How to improve efficiency of a program by using basic mathematical principles".

Total Participation: CSE and IT (120) students are participated in this 5 day's workshop on "Problem Solving and Data Structures for Employability Enhancement"

Total Participation: CSE and IT (120) students are participated in this 5 day's workshop on "Problem Solving and Data Structures for Employability Enhancement"

Feed Back:

1. I have learnt the optimized way to write any program for a given problem.

2 I really like the resource person's instructiveness while explaining the concept.
3. Earlier I have fear about programming but this seminar will really helps me to come out from that Phobia. Thanks to CSI Chapter of our college for organizing this.
4. It is really a superb workshop. Thank you.
5. I found it really insightful and interesting.

Action Taken: We have planned to conduct this kind of workshops at the beginning of 1st semester

Summary: Eminent resource person Mr Sai Satish from, CEO, Indian Servers.120 participants are as listeners. Good feedback received from participants for conducting the awareness program on "Problem Solving and Data Structures for Employability Enhancement ".

Organisers: Dr. N. Ravi Shankar, HOD, Dept. of CSE
Dr. D. Naga Raju, HOD, Dept. of IT.

Coordinators: Dr. S Naganjaneyulu,Mr K. Rajasekhar.

2- Workshop on "PC Game Development"

Two day National Level Workshop on "PC Game Development" during 4th & 5th Nov 2016 organized by Dept. of IT under CSI Student Branch.

1.Student Branch Name : **CSI – LBRCE STUDENT BRANCH (LAKI REDDY BALI REDY COLLEGE OF ENGINEERING)**
2.Region – V
3.Event Date : 4th and 5th November 2016,
4.Event Title : Two day workshop on "PC GAME DEVELOPMENT"
5.Speaker at the Event : Mr.K.Surya Prakash, Misplaced Minds
6.Gist of the Event (Few sentences regarding technical contents of the event)

The LBRCE CSI Student Branch organized a two day workshop on "PC Game Development" for students of CSE, IT Branches during 04-05 Nov'16. The program was inaugurated by Dr. E.V. Prasad, Director in the presence of Prof. R.Chandrasekaram, Dean, Dr.N.Ravi Sankar, HoD, CSE & Dr.D.Nagaraju, HoD, IT Department. Mr.K.Surya Prakash from Misplaced Minds was the resource person of the program. Prof.S.Naganjeyulu & M.Mahesh kumar coordinated the event.

Workshop on "PC GAME DEVELOPMENT"

Inauguration of Two day workshop on "PC GAME DEVELOPMENT"

The resource person Mr. K. Surya Prakash said despite the presence of mobile phones, tablets consoles and several other gadgets, PC and desktop games are still popular choices for gamers all across the world. Juego Studios develops fun and exciting 2D & 3D games for desktops and PCs.

Addressing by Mr.K.Surya Prakash, Misplaced Minds
Some of the advantages of PC Game Development

- PC games, unlike gaming consoles, offer an opportunity for hundreds of players to play one game simultaneously. The amount of enthusiasm or excitement such games provide, cannot really be expressed in words. This definitely contributes to the huge demand for PC Games.
- The connection options are many. You can connect over your local network and play the PC game with people who are connected to the same network. You can even connect using an internet connection and

- PC Games offer better audio and graphics. You can use a big HD monitor or you can connect your PC to your TV screen for great graphics. You can use excellent speakers for better audio and enjoy the game thoroughly.
- This platform offers absolutely no limitations when it comes to the number of games or type of games.

Most PC games are free-to-play games. You can play a lot of multiplayer PC games on the net absolutely free. You can also find websites that offer multiplayer demos for free

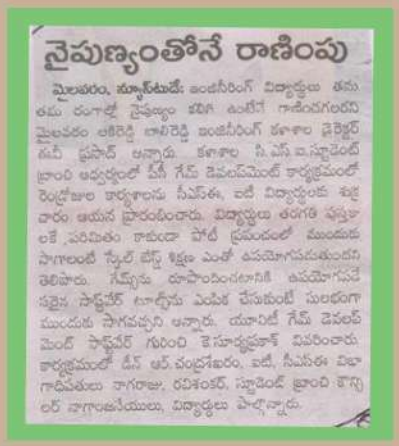
సాక్షి

ఈనాడు

స్కిల్ బేస్డ్ శిక్షణ పురోగతికి దోహదం

మైలవరం : స్కిల్ బేస్డ్ శిక్షణ విద్యార్థుల భవిష్యత్తు పురోభివృద్ధికి ఎంతో దోహదపడుతుందని ఎకిరెడ్డి బాలిరెడ్డి ఇంజినీరింగ్ కళాశాల డైరెక్టర్ డాక్టర్ ఈవీ ప్రసాద్ పేర్కొన్నారు మైలవరం ఎకిరెడ్డి బాలిరెడ్డి ఇంజినీరింగ్ కళాశాలలో సీఎస్‌ఈ స్టూడెంట్ ఛ్రాంప్ అధ్వర్యంలో మినీస్టైస్ మైక్రో వారి సహకారంతో పీసీ గేమ్ డెవలప్‌మెంట్ అనే అంశంపై సీఎస్‌ఈ, ఐటీ విద్యార్థులకు రెండు రోజుల వర్క్‌షాప్‌ను శుక్రవారం కళాశాల డైరెక్టర్ ప్రసాద్ శ్రీకాకుళం ప్రభుత్వ బేసి ప్రారంభించారు. పోటీ ప్రపంచంలో ముందుకు సాగాలంటే ఇటువంటి స్కిల్ బేస్డ్ ట్రైనింగ్ ఎంతో ఉపయోగపడుతుందన్నారు. ముఖ్య అతిథిగా పాల్గొన్న మిస్టేస్టర్ మైక్రో ప్రతినిధి వి. సూర్యప్రకాష్ యానిటీ అనే గేమ్ డెవలప్‌మెంట్ సాఫ్ట్‌వేర్ గురించి వివరంగా వివరించారు. కార్యక్రమంలో స్కూల్ ఆఫ్ కంప్యూటింగ్ డీన్ డాక్టర్ ఆర్. చంద్రశేఖరం, ఐటీ విభాగాధిపతి డాక్టర్ కె.నాగరాజు, సీఎస్‌ఈ విభాగాధిపతి డాక్టర్ ఎన్.గ సదస్సులో మాట్లాడుతున్న డైరెక్టర్ ప్రసాద్ విశంకర్ పాల్గొన్నారు. కార్యక్రమాన్ని విజయవంతంగా నిర్వహించినందుకు సీఎస్‌ఈ స్టూడెంట్ ఛ్రాంప్ కొన్సిలర్ డాక్టర్ నాగాంజనేయులును అభినందించారు.

5-11-16



నైపుణ్యంతోనే రాణింపు

మైలవరం, న్యూస్‌టుడే: ఇంజినీరింగ్ విద్యార్థులు తమ రంగాల్లో నైపుణ్యం కలిగి ఉంటే గాఢించగలరని మైలవరం ఎకిరెడ్డి బాలిరెడ్డి ఇంజినీరింగ్ కళాశాల డైరెక్టర్ ఈవీ ప్రసాద్ అన్నారు. కళాశాల సీ.ఎస్.ఐ.స్టూడెంట్ ఛ్రాంప్ ఆధ్వర్యంలో పీసీ గేమ్ డెవలప్‌మెంట్ కార్యక్రమంలో రెండ్రోజుల కార్యశాలను సీఎస్‌ఈ, ఐటీ విద్యార్థులకు శుక్రవారం ఆయన ప్రారంభించారు. విద్యార్థులు తరగతి పుస్తకాలకే పరిమితం కాకుండా పోటీ ప్రపంచంలో ముందుడు సాగాలంటే స్కిల్ బేస్డ్ శిక్షణ ఎంతో ఉపయోగపడుతుందని తెలిపారు. గేమ్స్‌ను రూపొందించటానికి ఉపయోగపడే సులభమైన సాఫ్ట్‌వేర్ టూల్స్‌ను ఎంపిక చేసుకుంటే సులభంగా ముందుకు సాగవచ్చని అన్నారు. యూనిటీ గేమ్ డెవలప్‌మెంట్ సాఫ్ట్‌వేర్ గురించి కె.సూర్యప్రకాష్ వివరించారు. కార్యక్రమంలో డీన్ ఆర్.చంద్రశేఖరం, ఐటీ, సీఎస్‌ఈ విభాగాధిపతులు నాగరాజు, రవిశంకర్, స్టూడెంట్ ఛ్రాంచి కొన్సిలర్ నాగాంజనేయులు, విద్యార్థులు పాల్గొన్నారు.

ALUMNI ASSOCIATION PHOTOS

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

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